

19338DA RECEIVED

MAR 5 1996

GROUP 1000

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Warmke, Jeffrey W.  
Van Der Ploeg, Leonardus

(ii) TITLE OF INVENTION: PROCESS FOR FUNCTIONAL EXPRESSION OF THE  
PARA SODIUM CHANNEL

(iii) NUMBER OF SEQUENCES: 7

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Jack L. Tribble  
(B) STREET: P.O. Box 2000, 126 E. Lincoln Avenue  
(C) CITY: Rahway  
(D) STATE: New Jersey  
(E) COUNTRY: USA  
(F) ZIP: 07065-0907

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk  
(B) COMPUTER: IBM PC compatible  
(C) OPERATING SYSTEM: PC-DOS/MS-DOS  
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER:  
(B) FILING DATE:  
(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Tribble, Jack L.  
(B) REGISTRATION NUMBER: 32,633  
(C) REFERENCE/DOCKET NUMBER: 19338DA

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (908) 594-5321  
(B) TELEFAX: (908) 594-4720

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 33 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GAECTCTAGAC GTTGGCCGCA TAGACAATGA CAG

33

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

AAGAGCTCGA CGAAGGGATC G

21

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 24 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

TCTTCGATCC CTTCGTCGAG CTCT

24

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 21 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

AAAGGATCCA AATATGATGA A

21

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 25 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

TTTGGATCCT TTTTCACACT CAATC 25

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 32 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GACTCTAGAG CTAATACTCG CGTGCATCTT GG 32

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

TCTAGACGTT GGCCGCATAG ACAATGACAG AAGATTCCGA CTCGATATCT GAGGAAGAAC	60
GCAGTTTGTGTT CCGTCCCTTT ACCCGCGAAT CATTGGTGCA AATCGAACAA CGCATTGCCG	120
CTGAACATGAA AAAGCAGAAG GAGCTGGAAA GAAAGAGAGC CGAGGGAGAG GTGCCGCGAT	180
ATGGTCGCAA GAAAAAACAA AAAGAAATCC GATATGATGA CGAGGACGAG GATGAAGGTC	240
CACAACCGGA TCCTACACTT GAACAGGGTG TGCCAATACC TGTTGATTG CAGGGCAGCT	300
TCCCCGCCGGA ATTGGCCTCC ACTCCTCTCG AGGATATCGA TCCCTACTAC AGCAATGTAC	360
TGACATTCTGAGT TGTTGTAAGC AAAGGAAAAG ATATTTTCG CTGGTCTGCA TCAAAAGCAA	420
TGTGGATGCT CGATCCATTC AATCCGATAC GTCGTGTGGC CATTTACATT CTAGTGCATC	480

CATTATTTTC CCTATTCA TCACACCACAA TTCTCGTCAA CTGCATCCTG ATGATAATGC	540
CGACAACGCC CACGGTTGAG TCCACTGAGG TGATATTCAC CGGAATCTAC ACATTGAAAT	600
CAGCTGTTAA AGTGATGGCA CGAGGTTCA TTTTATGCCG GTTTACGTAT CTTAGAGATG	660
CATGGAATTG GCTGGACTTC GTAGTAATAG CTTTAGCTTA TGTGACCATG GGTATAGATT	720
TAGGTAATCT AGCAGCCCTG CGAACGTTA GGGTGCTGCG AGCGCTTAAA ACCGTAGCCA	780
TTGTGCCAGG CTTGAAGACC ATCGTCGGCG CCGTCATCGA ATCGGTGAAG AATCTGCGCG	840
ATGTGATTAT CCTGACCATG TTCTCCCTGT CGGTGTTCGC GTTGATGGGC CTACAGATCT	900
ATATGGCGT GCTCACCGAG AAGTGCATCA AGAAGTTCCC GCTGGACGGT TCCTGGGGCA	960
ATCTGACCGA CGAGAACTGG GACTATCACA ATCGCAATAG CTCCAATTGG TATTCCGAGG	1020
ACGAGGGCAT CTCATTTCCG TTATGCGGCA ATATATCCGG TGCGGGGCAA TGCGACGACG	1080
ATTACGTGTG CCTGCAGGGG TTTGGTCCGA ATCCGAATTA TGGCTACACC AGCTTCGATT	1140
CGTTCGGATG GGCTTTCCTG TCCGCCTTCC GGCTGATGAC ACAGGACTTC TGGGAGGATC	1200
TGTACCAGCT GGTGTTGCGC GCCGCCGGAC CATGGCACAT GCTGTTCTTT ATAGTCATCA	1260
TCTTCCTAGG TTCATTCTAT CTTGTGAATT TGATTTGGC CATTGTTGCC ATGTCGTATG	1320
ACGAATTGCA AAGGAAGGCC GAAGAAGAAG AGGCTGCCGA AGAGGAGGCG ATACGTGAAG	1380
CGGAAGAACG TGCCGCCGCC AAAGCGGCCA AGCTGGAGGA GCAGGGCAAT GCGCAGGCTC	1440
AGGCAGCAGC GGATGCGGCT GCCGCCGAAG AGGCTGCACT GCATCCGGAA ATGGCCAAGA	1500
GTCCGACGTA TTCTTGCATC AGCTATGAGC TATTTGTTGG CGCGAGAAG GGCAACGATG	1560
ACAACAACAA AGAGAAGATG TCCATTCCGA GCGTCGAGGT GGAGTCGGAG TCGGTGAGCG	1620
TTATACAAAG ACAACCAGCA CCTACCACAG CACACCAAGC TACCAAAGTT CGTAAAGTGA	1680
GCACGACATC CTTATCCTTA CCTGGTTCAC CGTTAACAT ACGCAGGGGA TCACGTAGTT	1740
CTCACAAGTA CACGATACGG AACGGACGTG GCCGCTTGG TATACCCGGT AGCGATCGTA	1800
AGCCATTGGT ATTGTCAACA TATCAGGATG CCCAGCAGCA CTTGCCCTAT GCCGACGACT	1860
CGAATGCCGT CACCCGATG TCCGAAGAGA ATGGGGCCAT CATAGTGCCG GTGTACTATG	1920
GCAATCTAGG CTCCCCACAC TCATCGTATA CCTCGCATCA GTCCCGAATA TCGTATACCT	1980
CACATGGCGA TCTACTCGGC GGCATGGCCG TCATGGCGT CAGCACAATG ACCAAGGAGA	2040
GCAAATTGCG CAACCGAAC ACACGCAATC AATCAGTGGG CGCCACCAAT GGCAGGACCA	2100
CCTGTCTGGA CACCAATCAC AAGCTCGATC ATCGCGACTA CGAAATTGGC CTGGAGTGCA	2160

CGGACGAAGC TGGCAAGATT AAACATCATG ACAATCCTTT TATCGAGCCC GTCCAGACAC	2220
AAACGGTGGT TGATATGAAA GATGTGATGG TCCTGAATGA CATCATCGAA CAGGCCGCTG	2280
GTCGGCACAG TCGGGCAAGC GATCGCGGTG TCTCCGTTA CTATTCCCA ACAGAGGACG	2340
ATGACGAGGA TGGGCCGACG TTCAAAGACA AGGCACTCGA AGTGATCCTC AAAGGCATCG	2400
ATGTGTTTG TGTGTGGAC TGTTGCTGGG TTTGGTTGAA ATTTCAGGAG TGGGTATCGC	2460
TCATCGTCTT CGATCCCTTC GTCGAGCTCT TCATCACGCT GTGCATTGTG GTCAACACGA	2520
TGTTCATGGC AATGGATCAC CACGATATGA ACAAGGAGAT GGAACGCGTG CTCAGAGTG	2580
GCAACTATT CTTCACCGCC ACCTTGCCA TCGAGGCCAC CATGAAGCTA ATGCCATGA	2640
GCCCCAAGTA CTATTCCAG GAGGGCTGGA ACATCTTCGA CTTCATTATC GTGGCCCTAT	2700
CGCTATTGGA ACTGGGACTC GAGGGTGTCC AGGGTCTGTC CGTATTGCGT TCCTTCGAT	2760
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TTCCGGATGG CGACCTGCCG CGCTGGAAC TCACCGACTT TATGCACAGC TTCATGATCG	3000
TGTTCCGGGT GCTCTCGGA GAATGGATCG AGTCCATGTG GGAUTGCATG TACGTGGCG	3060
ATGTCTCGTG CATTCCCTTC TTCTTGCCA CCGTTGTCAT CGGCAATCTT GTGGTACTTA	3120
ACCTTTCTT AGCCTTGCTT TTGTCCAATT TTGGCTCATC TAGCTTATCA GCGCCGACTG	3180
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GGGTTAACCG TAATATTGCT GATTGTTCA AGTTAATACG TAACAAATTG ACAATCAA	3300
TAAGTGATCA ACCATCAGGT GAGAGGACCA ACCAGATCAG TTGGATTGAG AGCGAAGAGC	3360
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GTTTGTCTT ACAGGACGAC GACACTGCCA GCATTAACTC ATATGGTAGC CATAAGAATC	3660
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GCGACGCCAG CAAGGAGGAT TTAGGTCTCG ACGAGGAACG GGACGAGGAG GCGAATGCG	3780
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TTGAAAATAA	ATATTTGAA	ACAGCTGTTA	TCACTATGAT	TTTAATGAGT	AGCTTAGCTT	4020
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GCTTCAAAGT	GTACTTCACC	AACGCGTGGT	GTTGGCTCGA	TTTCGTGATT	GTCATGGTAT	4200
CGCTTATCAA	CTTCGTTGCT	TCACTTGGTG	GAGCTGGTGG	TATTCAAGCC	TTCAAGACTA	4260
TGCGAACGTT	AAGAGCACTG	AGACCACTAC	GTGCCATGTC	CCGTATGCAG	GGCATGAGGG	4320
TCGTCGTTAA	TGCGCTGGTA	CAAGCTATAC	CGTCCATCTT	CAATGTGCTA	TTGGTGTGTC	4380
TAATATTTTG	GCTAATTTTT	GCCATAATGG	GTGTACAGCT	TTTGCTGGA	AAATATTTA	4440
AGTGCAGGGA	CATGAATGGC	ACGAAGCTCA	GCCACGAGAT	CATACCAAAT	CGCAATGCCT	4500
GCGAGAGCGA	GAACTACACG	TGGGTGAATT	CAGCAATGAA	TTTCGATCAT	GTAGGTAACG	4560
CGTATCTGTG	CCTTTCCAA	GTGGCCACCT	TCAAAGGCTG	GATACAAATC	ATGAACGATG	4620
CTATCGATTC	ACGAGAGGTG	GACAAGAAC	CAATTCTGTA	AACGAACATC	TACATGTATT	4680
TATATTCGT	ATTCTTCATC	ATATTTGGAT	CCTTTTCAC	ACTCAATCTG	TTCATTGGTG	4740
TTATCATTGA	TAATTTAAT	GAGCAAAAGA	AAAAAGCAGG	TGGATCATTA	GAAATGTTCA	4800
TGACAGAAGA	TCAGAAAAAG	TACTATAATG	CTATGAAAAA	GATGGGCTCT	AAAAAACCAT	4860
TAAAAGCCAT	TCCAAGACCA	AGGTGGCGAC	CACAAGCAAT	AGTCTTGAA	ATAGTAACCG	4920
ATAAGAAATT	CGATATAATC	ATTATGTTAT	TCATTGGTCT	GAACATGTTC	ACCATGACCC	4980
TCGATCGTTA	CGATGCGTCG	GACACGTATA	ACGCCGTCT	AGACTATCTC	AATGCGATAT	5040
TCGTTAGTTAT	TTTCAGTTCC	GAATGTCTAT	TAAAAATATT	CGCTTTACGA	TATCACTATT	5100
TTATTGAGCC	ATGGAATTAA	TTTGATGTAG	TAGTTGTCAT	TTTATCCATC	TTAGGTCTTG	5160
TACTTAGCCA	TATTATCGAG	AAGTACTTCG	TGTCGCCGAC	CCTGCTCCGA	GTGGTGCCTG	5220
TGGCGAAAGT	GGGCCATGTC	CTTCGACTGG	TGAAGGGAGC	CAAGGGCATT	CGGACACTGC	5280
TCTTCGCGTT	GGCCATGTCG	CTGCCGGCCC	TGTTCAACAT	CTGCCTGCTG	CTGTTCTGG	5340
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GCATTAACGA	CGTCTACAAC	TTCAAGACCT	TTGGCCAGAG	CATGATCCTG	CTCTTTCAGA	5460
TGTCGACGTC	AGCCGGTTGG	GATGGTGTAC	TGGACGCCAT	TATCAATGAG	GAAGCATGCG	5520

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GCGATGGCGG TGATCCGGAT GCCGGGGACC CGGCGCCCGA TGAAGCAACG GACGGCGATG	6180
CGCCCGCTGG TGGAGATGGT AGTGTAAACG GTACTGCAGA AGGAGCTGCC GATGCCGATG	6240
AGAGTAATGT AAATAGTCCG GGTGAGGATG CAGCGGCCGGC GGCAGCAGCA GCAGCAGCAG	6300
CGGCAGCGGC GGGCACGACG ACGGCGGGAA GTCCCGGAGC GGGTAGCGCC GGGCGACAGA	6360
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CCCTCCAAGA TGCACGCGAG TATTAGCTCT AGA	6513